REMARKS

This is a full and timely response to the above identified Office Action wherein claims 1-40 were examined; claims 1-25, 28 and 30-35 were allowed; and claims 26, 27, 29 and 36-40 were rejected. Favorable reconsideration and allowance of the rejected claims in light of the amendments and arguments presented in this response, are respectfully requested.

Rejections Under 35 USC § 112

The rejection of claims 26, 27, 29 and 40 under 35 USC § 112, second paragraph is respectfully traversed. Claims 26, 27 and 29 have been amended to avoid the use of "they" and thus obviate any indefiniteness.

Claim 40 has been reviewed. However, in the absence of specific indication in the rejection by the PTO as to what problem is deemed to exist with this claim, and in the absence of any shortcoming that could be envisaged with respect to its syntax and form, it is submitted that claim 40 is, along with claims 26, 27 and 29 as amended, both clear and definite. Reconsideration of this rejection of claim 40 is respectfully requested.

Rejection Under 35 USC § 102

1) The rejection of claims 39 and 40 under 35 USC § 102(b) as being anticipated by Reitan is respectfully traversed.

In this response, claim 39 has been amended to call for the at least one actuator to be located under the manifold and in-between said injection nozzles. The actuator in Reitan is located to one side of the injection nozzles so that the cam rod (71), on which the claimed common linkage element is being read, can be axially displaced and operate the nozzles simultaneously. Inasmuch as the Reitan reference does not disclose

an actuator disposition of the nature now claimed, the anticipation rejection is overcome and claims 29 and 40 are rendered patentable thereover.

2) The rejection of claims 39 and 40 under 35 USC § 102(e) as being anticipated by Belous is respectfully traversed.

The Belous arrangement locates the actuator to one side of the injectors and drives the rack (75) back and forth in the manner depicted in Fig. 2. This reference, therefore, cannot meet the requirement that the actuator be located under the manifold and in-between said injection nozzles. The anticipation rejection is therefore rendered moot.

Rejections Under 35 USC § 103

The rejection of claims 36-38 under 35 USC § 103(a) as being unpatentable over Gellert'387 in view of Kowtko et al. (Kowtko) is respectfully traversed.

In this rejection, it is acknowledged that Gellert'387 does not disclose that the at least one actuator is centrally located among the injection nozzles. To overcome this admitted shortcoming, the PTO cites Kowtko to show an actuator which is located centrally with respect to the nozzles. The motivation alleged for the hypothetical person of ordinary skill to consider a transfer of teachings from Kowtko to Gellert'387, is that the transfer would result in an arrangement wherein the valve pins of Gellert'387 would all be connected to a single linkage arrangement and that this would allow for a multiplied effect of controlling the opening and closing of a plurality of injection nozzles as compared to a single nozzle.

However, this logic overlooks the fact that Gellert'387 utilizes two actuators per injection nozzle and that the ability to selectively operate each individual nozzle would be lost if the allegedly obvious transfer of teachings were to be implemented. The

rejection further overlooks the fact that Kowtko locates the actuator on the opposite of the yoke or platen (see element 94 in Fig. 6) whereas Gellert'387 locates the actuators on the same side of the yoke 62. The redesign that would required if the transfer were to be implemented would therefore appear to merely convert the arrangement disclosed in Gellert'387 into the arrangement disclosed in Kowtko.

It is submitted that irrespective of the fact that the transfer could be made if the hypothetical person of ordinary skill were to be so motivated (which Applicant does not concede), it not seen that this hypothetical person of ordinary skill would, while working with a total lack of any knowledge of the claimed subject matter and without any inventive activity, be motivated to consider transferring teachings from one reference to another based on the disclosures of the references taken as whole. Neither reference contains any indication that a problem or shortcoming may exist in the Gellert'387 arrangement. Therefore, it is not seen that the hypothetical person of ordinary skill would be motivated to change the dual actuator arrangement of Gellert'387 to a single actuator arrangement such as found in Kowtko, simply to enable a plurality of injectors to be limited to simultaneous operation.

"The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also *suggests* the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1420 (Fed. Cir. 1990)." M.P.E.P. § 2143.01 (emphasis added). There is no suggestion in either reference to combine their teachings.

Further, claim 36 has been amended to call for the common linkage element to move the in same direction as the valve pins and for the actuator to be located below the manifold via which the heated melt material is supplied to the nozzles. It is submitted that neither of the Gellert'387 or Kowtko references suggest this structure.

It is therefore submitted that the teachings of Gellert'387 and Kowtko would not be sufficient to enable the proposed modification from a concept of "two actuators/injector" to a concept of "single actuator/plural injectors", and also relocate the actuator to a position below the manifold through which the heated melt is supplied. Reconsideration and withdrawal of the rejection under 35 USC § 103(a) is therefore respectfully requested.

Conclusion

In view of the forgoing, it is respectfully submitted that the present claims are all in condition for allowance. An early notice to that effect is earnestly solicited. Should there be any questions, the Examiner is invited to contact the undersigned at the number shown below.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

26. (Amended) Injection molding apparatus according to claim 1, wherein [the actuator of] each actuating assembly comprises a plurality of actuators that flank the injection nozzles that [they actuate] **the actuators actuate**.

27. (Amended) Injection molding apparatus according to claim 1, wherein the actuator of each actuating assembly [are] **is** centrally located among the injection nozzles that [they actuate] **the actuator actuates**.

29. (Amended) Injection molding apparatus according to claim 28, comprising a plurality of actuators driving each common linkage element, wherein the actuators of each actuating assembly flank the injection nozzles that [they actuate] **the actuators actuate**.

36. (Amended) Injection molding apparatus comprising:

an array of injection nozzles, each nozzle having a melt channel and a valve pin movable within the melt channel, each valve pin having a driven portion and a tip end that controls melt flow through a mold gate;

a melt distribution manifold in fluid communication with the array of injection nozzles; and

an actuating assembly for displacing the valve pins of the array of injection nozzles, comprising at least one actuator and a common linkage element driven by the actuator and linked to the driven portions of all of the valve pins of the array of injection nozzles to move the valve pins in unison, wherein the **common linkage element moves along the same direction as the valve pins and the** at least one actuator is located [between] **under** the **manifold** [common linkage element and the tip ends of the valve pins].

39. (Amended) Injection molding apparatus comprising:

an array of injection nozzles, each nozzle having a melt channel and a valve pin movable within the melt channel, each valve pin having a driven portion and a tip end that controls melt flow through a mold gate;

a melt distribution manifold in fluid communication with the array of injection nozzles; and

an actuating assembly for displacing the valve pins of the array of injection nozzles, comprising at least one actuator and a common linkage element driven by the actuator and linked to the driven portions of all of the valve pins of the array of injection nozzles to move the valve pins in unison, wherein the at least one actuator is located **under the manifold and in-between said injection nozzles** [between the melt distribution manifold and the tip ends of the valve pins].